

11



1

1

1

1

1

1

9

☐

4

7

7

☐☐☐☐☐☐☐

3/1/95



PCT10

RAW SEQUENCE LISTING

DATE: 11/25/2002

PATENT APPLICATION: US/10/018,192

TIME: 18:28:12

Input Set : N:\Crf4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw

```

1 <110> APPLICANT: Synaptic Pharmaceutical Corporation
2 <120> TITLE OF INVENTION: DNA Encoding SNORF36a and SNORF36b Receptors
3 <130> FILE REFERENCE: 59138-B-PCT/JPW
4 <140> CURRENT APPLICATION NUMBER: US/10/018,192
5 <141> CURRENT FILING DATE: 2002-11-01
6 <150> PRIOR APPLICATION NUMBER: 09/518,914
7 <151> PRIOR FILING DATE: 2000-03-03
8 <150> PRIOR APPLICATION NUMBER: 09/303,593
9 <151> PRIOR FILING DATE: 1999-05-03
10 <160> NUMBER OF SEQ ID NOS: 48
11 <170> SOFTWARE: PatentIn Ver. 2.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 1508
15 <212> TYPE: DNA
16 <213> ORGANISM: Homo sapiens
17 <400> SEQUENCE: 1
18      caactcagga tgaaccctcc ttctggggcca agagtcccgcc ccagcccaac ccaagagccc 60
19      agctgcatgg ccaccccagc accacccagc tgggtgggaca gctcccagag cagcatctcc 120
20      agcctggggc ggcttccatc catcagtcac acagcacctg ggacttgggc tgctgcctgg 180
21      gtccccctcc ccacggttga tgttccagac catgccactc ataccctggg cacagtgatc 240
22      ttgctggtgg gactcacggg gatgctgggc aacctgacgg tcatctatac cttctgcagg 300
23      agcagaagcc tccggacacc tgccaacatg ttcattatca acctcgcggt cagcgacttc 360
24      ctcatgtcct tcaccagggc ccctgtcttc ttcaccagta gcctctataa gcagtggctc 420
25      tttggggaga caggctgcga gttctatgcc ttctgtggag ctctcttttg catttccctc 480
26      atgatcaccg tgacggccat cgccctggac cgctacctgg taatcacacg cccgctggcc 540
27      acctttgggt tggcgctcaa gaggcgtgcg gcatttgtcc tgctgggcgt ttggctctat 600
28      gccctggcct ggagtctgcc acccttcttc ggctggagcg cctacgtgcc cgaggggttg 660
29      ctgacatcct gctcctggga ctacatgagc ttcacgccgg ccgtgcgtgc ctacaccatg 720
30      cttctctgct gcttcgtgtt cttcctccct ctgcttatca tcatctactg ctacatcttc 780
31      atcttcaggg ccattccggg gacaggacgg gctctccaga ccttcggggc ctgcaagggc 840
32      aatggcgagt ccctgtggca gcggcagcg ctgcagagcg agtgcaagat ggccaagatc 900
33      atgctgctgg tcacctcctc cttcgtgctc tcctgggctc cctattccgc tgtggccctg 960
34      gtggcctttg ctgggtacgc acacgtcctg acaccctaca tgagctcggt gccagccgtc 1020
35      atcgccaagg cctctgcaat ccacaacccc atcatttacg ccatcaccca cccaagtac 1080
36      aggggtggca ttgcccagca cctgccctgc ctgggggtgc tgctgggtgt atcagccgg 1140
37      cacagtcgcc cctaccccag ctaccgctcc accaccgct ccacgctgac cagccacacc 1200
38      tccaacctca gctgcatctc catacggagg cgccaggagt ccctgggctc ggagagttag 1260
39      gtgggctgga cacacatgga ggcagcagct gtgtggggag ctgcccagca agcaaatggg 1320
40      cggctccctc acggctcaggg tctggaggac ttggaagcca aggcaccccc agacccccag 1380
41      ggacacgaag cagagactcc agggaagacc aaggggctga tccccagcca ggaccccagg 1440
42      atgtaggacg cccactggct ctccctttct tctgagacac atccagcccc cccacgtctc 1500
43      cctcatat
44      1508
45 <210> SEQ ID NO: 2

```

RAW SEQUENCE LISTING

DATE: 11/25/2002

PATENT APPLICATION: US/10/018,192

TIME: 18:28:12

Input Set : N:\Cr4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw

```

46 <211> LENGTH: 478
47 <212> TYPE: PRT
48 <213> ORGANISM: Homo sapiens
49 <400> SEQUENCE: 2
50   Met Asn Pro  Pro Ser Gly Pro Arg Val  Pro Pro Ser  Pro Thr Gln Glu
51       1              5              10              15
52   Pro Ser Cys Met Ala Thr Pro Ala  Pro Pro Ser Trp Trp Asp Ser Ser
53           20              25              30
54   Gln Ser Ser Ile Ser Ser Leu Gly Arg Leu Pro Ser Ile Ser Pro Thr
55       35              40              45
56   Ala Pro Gly Thr Trp Ala Ala Trp Val  Pro Leu Pro Thr Val Asp
57       50              55              60
58   Val Pro Asp His Ala His Tyr Thr Leu Gly Thr Val Ile Leu Leu Val
59       65              70              75              80
60   Gly Leu Thr Gly Met Leu Gly Asn Leu Thr Val Ile Tyr Thr Phe Cys
61           85              90              95
62   Arg Ser Arg Ser Leu Arg Thr Pro Ala Asn Met Phe Ile Ile Asn Leu
63           100             105             110
64   Ala Val Ser Asp Phe Leu Met Ser Phe Thr Gln Ala Pro Val Phe Phe
65       115             120             125
66   Thr Ser Ser Leu Tyr Lys Gln Trp Leu Phe Gly Glu Thr Gly Cys Glu
67       130             135             140
68   Phe Tyr Ala Phe Cys Gly Ala Leu Phe Gly Ile Ser Ser Met Ile Thr
69       145             150             155             160
70   Leu Thr Ala Ile Ala Leu Asp Arg Tyr Leu Val Ile Thr Arg Pro Leu
71           165             170             175
72   Ala Thr Phe Gly Val Ala Ser Lys Arg Arg Ala Ala Phe Val Leu Leu
73           180             185             190
74   Gly Val Trp Leu Tyr Ala Leu Ala Trp Ser Leu Pro Pro Phe Phe Gly
75       195             200             205
76   Trp Ser Ala Tyr Val Pro Glu Gly Leu Leu Thr Ser Cys Ser Trp Asp
77       210             215             220
78   Tyr Met Ser Phe Thr Pro Ala Val Arg Ala Tyr Thr Met Leu Leu Cys
79       225             230             235             240
80   Cys Phe Val Phe Phe Leu Pro Leu Leu Ile Ile Ile Tyr Cys Tyr Ile
81           245             250             255
82   Phe Ile Phe Arg Ala Ile Arg Glu Thr Gly Arg Ala Leu Gln Thr Phe
83           260             265             270
84   Gly Ala Cys Lys Gly Asn Gly Glu Ser Leu Trp Gln Arg Gln Arg Leu
85       275             280             285
86   Gln Ser Glu Cys Lys Met Ala Lys Ile Met Leu Leu Val Ile Leu Leu
87       290             295             300
88   Phe Val Leu Ser Trp Ala Pro Tyr Ser Ala Val Ala Leu Val Ala Phe
89       305             310             315             320
90   Ala Gly Tyr Ala His Val Leu Thr Pro Tyr Met Ser Ser Val Pro Ala
91           325             330             335
92   Val Ile Ala Lys Ala Ser Ala Ile His Asn Pro Ile Ile Tyr Ala Ile
93           340             345             350
94   Thr His Pro Lys Tyr Arg Val Ala Ile Ala Gln His Leu Pro Cys Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,192

DATE: 11/25/2002

TIME: 18:28:12

Input Set : N:\Cr4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw

```

95          355          360          365
96      Gly Val Leu Leu Gly Val Ser Arg Arg His Ser Arg Pro Tyr Pro Ser
97          370          375          380
98      Tyr Arg Ser Thr His Arg Ser Thr Leu Thr Ser His Thr Ser Asn Leu
99      385          390          395          400
100      Ser Trp Ile Ser Ile Arg Arg Arg Gln Glu Ser Leu Gly Ser Glu Ser
101          405          410          415
102      Glu Val Gly Trp Thr His Met Glu Ala Ala Ala Val Trp Gly Ala Ala
103          420          425          430
104      Gln Gln Ala Asn Gly Arg Ser Leu Tyr Gly Gln Gly Leu Glu Asp Leu
105          435          440          445
106      Glu Ala Lys Ala Pro Pro Arg Pro Gln Gly His Glu Ala Glu Thr Pro
107          450          455          460
108      Gly Lys Thr Lys Gly Leu Ile Pro Ser Gln Asp Pro Arg Met
109      465          470          475
111 <210> SEQ ID NO: 3
112 <211> LENGTH: 1541
113 <212> TYPE: DNA
114 <213> ORGANISM: Homo sapiens
115 <400> SEQUENCE: 3
116      caactcagga tgaaccctcc ttcgggggcca agagtcccgc ccagcccaac ccaagagccc 60
117      agctgcatgg ccaccccagc accaccagc tgggtgggaca gctcccagag cagcatctcc 120
118      agcctggggc ggcttccatc catcagtccc acagcacctg ggacttgggc tgtgcctgg 180
119      gtccccctcc ccacggttga tgttccagac catgcccact ataccctggg cacagtgatc 240
120      ttgctggtgg gactcacggg gatgctgggc aacctgacgg tcatctatac cttctgcaga 300
121      gctgtgcttc gtggagtcac tgtgatgatg cagagcagaa gcctccggac acctgccaac 360
122      atgttcatta tcaacctcgc ggtcagcgac ttctcatgt ccttcacca ggcccctgtc 420
123      ttcttcacca gtagcctcta taagcagtgg ctctttgggg agacaggctg cgagttctat 480
124      gccttctgtg gagctctctt tggcatttcc tccatgatca ccctgacggc catcgccctg 540
125      gaccgctacc tggtaatcac acgcccgtg gccaccttg gtgtggcgtc caagaggcgt 600
126      ggggcatttg tcctgctggg cgtttggtc tatgccctgg cctggagctt gccaccttc 660
127      ttcggtgga ggcctacgt gcccagggg ttgctgacat cctgctcctg ggactacatg 720
128      agcttcacgc cgccctgctg tgcctacacc atgcttctct gctgcttcgt gttcttctc 780
129      cctctgctta tcatcatcta ctgctacatc ttcatcttca gggccatccg ggagacagga 840
130      cgggctctcc agaccttcgg ggccctgcaag ggcaatggcg agtccctgtg gcagcggcag 900
131      cggctgcaga gcgagtgcaa gatggccaag atcatgctgc tggtcacct cctcttcgtg 960
132      ctctcctggg ctccctattc cgctgtggcc ctggtggcct ttgctgggta cgcacacgtc 1020
133      ctgacaccct acatgagctc ggtgccagcc gtcctgccca aggcctctgc aatccacaac 1080
134      cccatcattt acgccatcac ccacccaag tacagggtgg ccattgcca gcacctgcc 1140
135      tgcctggggg tgcgtgctgg tgtatcacgc cggcacagtc gccctaccc cagctaccgc 1200
136      tccaccacc gctccacgct gaccagccac acctccaacc tcagctggat ctccatacgg 1260
137      aggcgccagg agtccctggg ctcgagaggt gaggtgggct ggacacacat ggaggcagca 1320
138      gctgtgtggg gagctgccca gcaagcaaat gggcgggtccc tctacggtca gggctctggag 1380
139      gacttgaag ccaaggcacc cccagaccc cagggacacg aagcagagac tccagggaag 1440
140      accaaggggc tgatccccag ccaggacccc aggatgtagg acgcccactg gctctccctt 1500
141      tcttctgaga cacatccagc cccccacgt ctccctcata t 1541
143 <210> SEQ ID NO: 4
144 <211> LENGTH: 489
145 <212> TYPE: PRT

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,192

DATE: 11/25/2002

TIME: 18:28:12

Input Set : N:\Crf4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw

```

146 <213> ORGANISM: Homo sapiens
147 <400> SEQUENCE: 4
148 Met Asn Pro Pro Ser Gly Pro Arg Val Pro Pro Ser Pro Thr Gln Glu
149 1 5 10 15
150 Pro Ser Cys Met Ala Thr Pro Ala Pro Pro Ser Trp Trp Asp Ser Ser
151 20 25 30
152 Gln Ser Ser Ile Ser Ser Leu Gly Arg Leu Pro Ser Ile Ser Pro Thr
153 35 40 45
154 Ala Pro Gly Thr Trp Ala Ala Trp Val Pro Leu Pro Thr Val Asp
155 50 55 60
156 Val Pro Asp His Ala His Tyr Thr Leu Gly Thr Val Ile Leu Leu Val
157 65 70 75 80
158 Gly Leu Thr Gly Met Leu Gly Asn Leu Thr Val Ile Tyr Thr Phe Cys
159 85 90 95
160 Arg Ala Val Leu Arg Gly Val Thr Val Met Met Gln Ser Arg Ser Leu
161 100 105 110
162 Arg Thr Pro Ala Asn Met Phe Ile Ile Asn Leu Ala Val Ser Asp Phe
163 115 120 125
164 Leu Met Ser Phe Thr Gln Ala Pro Val Phe Phe Thr Ser Ser Leu Tyr
165 130 135 140
166 Lys Gln Trp Leu Phe Gly Glu Thr Gly Cys Glu Phe Tyr Ala Phe Cys
167 145 150 155 160
168 Gly Ala Leu Phe Gly Ile Ser Ser Met Ile Thr Leu Thr Ala Ile Ala
169 165 170 175
170 Leu Asp Arg Tyr Leu Val Ile Thr Arg Pro Leu Ala Thr Phe Gly Val
171 180 185 190
172 Ala Ser Lys Arg Arg Ala Ala Phe Val Leu Leu Gly Val Trp Leu Tyr
173 195 200 205
174 Ala Leu Ala Trp Ser Leu Pro Pro Phe Phe Gly Trp Ser Ala Tyr Val
175 210 215 220
176 Pro Glu Gly Leu Leu Thr Ser Cys Ser Trp Asp Tyr Met Ser Phe Thr
177 225 230 235 240
178 Pro Ala Val Arg Ala Tyr Thr Met Leu Leu Cys Cys Phe Val Phe Phe
179 245 250 255
180 Leu Pro Leu Leu Ile Ile Ile Tyr Cys Tyr Ile Phe Ile Phe Arg Ala
181 260 265 270
182 Ile Arg Glu Thr Gly Arg Ala Leu Gln Thr Phe Gly Ala Cys Lys Gly
183 275 280 285
184 Asn Gly Glu Ser Leu Trp Gln Arg Gln Arg Leu Gln Ser Glu Cys Lys
185 290 295 300
186 Met Ala Lys Ile Met Leu Leu Val Ile Leu Leu Phe Val Leu Ser Trp
187 305 310 315 320
188 Ala Pro Tyr Ser Ala Val Ala Leu Val Ala Phe Ala Gly Tyr Ala His
189 325 330 335
190 Val Leu Thr Pro Tyr Met Ser Ser Val Pro Ala Val Ile Ala Lys Ala
191 340 345 350
192 Ser Ala Ile His Asn Pro Ile Ile Tyr Ala Ile Thr His Pro Lys Tyr
193 355 360 365
194 Arg Val Ala Ile Ala Gln His Leu Pro Cys Leu Gly Val Leu Leu Gly

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,192

DATE: 11/25/2002

TIME: 18:28:12

Input Set : N:\Crf4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw

```

195          370          375          380
196 Val Ser Arg Arg His Ser Arg Pro Tyr Pro Ser Tyr Arg Ser Thr His
197 385          390          395          400
198 Arg Ser Thr Leu Thr Ser His Thr Ser Asn Leu Ser Trp Ile Ser Ile
199          405          410          415
200 Arg Arg Arg Gln Glu Ser Leu Gly Ser Glu Ser Glu Val Gly Trp Thr
201          420          425          430
202 His Met Glu Ala Ala Ala Val Trp Gly Ala Ala Gln Gln Ala Asn Gly
203          435          440          445
204 Arg Ser Leu Tyr Gly Gln Gly Leu Glu Asp Leu Glu Ala Lys Ala Pro
205          450          455          460
206 Pro Arg Pro Gln Gly His Glu Ala Glu Thr Pro Gly Lys Thr Lys Gly
207 465          470          475          480
208 Leu Ile Pro Ser Gln Asp Pro Arg Met
209          485
211 <210> SEQ ID NO: 5
212 <211> LENGTH: 250
213 <212> TYPE: DNA
214 <213> ORGANISM: Rattus norvegicus
215 <400> SEQUENCE: 5
216 catagccatg gaccgctatc tggtgatcac acgtccactg gccaccatcg gcatgagatc 60
217 caagagacgg acggcactag tcttgctagg tgtctggctc tatgccctgg cctggagttc 120
218 gccgcctttc tttggctgga gcgcctacgt gcccgagggg ctgctgacat cctgctcctg 180
219 ggactacgtg accttcacgc cctcgtgcg cgccctacacc atgctgctct tctgctttgt 240
220 cttcttctc 250
222 <210> SEQ ID NO: 6
223 <211> LENGTH: 83
224 <212> TYPE: PRT
225 <213> ORGANISM: Rattus norvegicus
226 <400> SEQUENCE: 6
227 Ile Ala Met Asp Arg Tyr Leu Val Ile Thr Arg Pro Leu Ala Thr Ile
228 1 5 10 15
229 Gly Met Arg Ser Lys Arg Arg Thr Ala Leu Val Leu Leu Gly Val Trp
230 20 25 30
231 Leu Tyr Ala Leu Ala Trp Ser Leu Pro Pro Phe Phe Gly Trp Ser Ala
232 35 40 45
233 Tyr Val Pro Glu Gly Leu Leu Thr Ser Cys Ser Trp Asp Tyr Val Thr
234 50 55 60
235 Phe Thr Pro Leu Val Arg Ala Tyr Thr Met Leu Leu Phe Cys Phe Val
236 65 70 75 80
237 Phe Phe Leu
239 <210> SEQ ID NO: 7
240 <211> LENGTH: 1473
241 <212> TYPE: DNA
242 <213> ORGANISM: Rattus norvegicus
243 <400> SEQUENCE: 7
244 tttaagtcct ccaagagcct gagcatgaac tctccttcag aatcaagagt cccttcaagc 60
245 ttaactcagg atcccagctt taccgccagc cctgccctcc tacaaggcat ttggaacagc 120
246 actcagaaca tctccgtcag agtccagctt ctatccgtta gccccacgac acctgggctt 180

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/018,192

DATE: 11/25/2002

TIME: 18:28:13

Input Set : N:\Crf4\11182002\J018192.raw

Output Set: N:\CRF4\11252002\J018192.raw